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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/042,244      | 01/11/2002  | Cyprian Uzoh         | 2022/48640DV        | 5254             |

7590 02/25/2005

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P.O. Box 14300  
Washington, DC 20044-4300

EXAMINER

LEADER, WILLIAM T

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1742

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

LD

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/042,244             | UZOH ET AL.         |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | William T. Leader      | 1742                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 December 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Receipt of the papers filed on December 3, 2004, is acknowledged. Claims 12-27 are pending.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. In view of the amendments to claims 18, 19 and 26, the rejection of these claims under 35 U.S.C. 112, second paragraph, is withdrawn.
4. Claims 12-14, 16-23, 25, 26, 30, 32-42 and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Morrissey (5,277,790) for the reasons given in the previous office action and in view of the following comments.
5. Claims 12, 13, 15-18, 20-22, 24-26, 30, 32-41 and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Berdan et al (4,169,018) for the reasons given in the previous office action and in view of the following comments.

6. Claim 12, 13, 18, 20-22, 26, 30, 32-35 and 37-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Landau et al (6,113,771) for the reasons given in the previous office action and in view of the following comments.

7. Claims 12-14, 19, 21-23, 27, 30 and 32-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Drent (5,369,074) for the reasons given in the previous office action and in view of the following comments.

8. Claims 12, 13, 18, 21, 22, 26, 28, 29, 32-39, 41, 44 and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by DeNinno et al (6,147,089) for the reasons given in the previous office action and in view of the following comments.

9. Claims 15 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morrissey (5,277,790) for the reasons given in the previous office action and in view of the following comments.

10. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berdan et al (4,169,018) for the reasons given in the previous office action and in view of the following comments.

11. Claims 16, 17, 25, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landau et al (6,113,771) for the reasons given in the previous office action and in view of the following comments.

12. Applicant's Remarks have been carefully considered but are not deemed to be persuasive. Applicant's has amended independent claims 12, 21 and 36 to recite that a concentration of the oxidizer is selected for depositing the conductive material on the substrate while a surface of the conductive material is polished by a pad to achieve a planar surface. Applicant argues that none of the references discloses or suggests a plating solution having an oxidizer in an amount effective for both depositing and polishing conductive material to achieve a planar surface as now recited. Applicant's argument is not persuasive. A number of applicant's dependent claims recite concentration by range rather than by function as the independent claims now do. A dependent claims must limit the claim upon which it depends. Thus, the plating solutions of the dependent claims must be capable of performing the function of the amended independent claims. Consequently, the concentration ranges of the dependent claims must result in a solution capable of performing the newly recited function in claims 12, 21 and 36. For the reasons given in the previous office action, the concentrations within the ranges recited in the dependent claims are anticipated or obvious. Since these actual concentrations

are suggested by the prior art, and the plating solutions of the prior art will therefore necessarily be capable of performing the newly recited function. The discovery of a new property of an old composition does not make the old composition patentable to the discoverer.

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

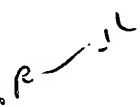
Any inquiry concerning this communication or earlier communications from the examiner should be directed to William T. Leader whose telephone number is

571-272-1245. The examiner can normally be reached on Mondays-Thursdays and alternate Fridays, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
William Leader  
February 15, 2005

  
ROY KING  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700